

## WHAT IS CLAIMED IS:

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1. An apparatus for providing bifurcated voice and signaling data over a network, comprising:
- 10 a memory, for storing protocols for interfacing with the network; and
- a processor, coupled to said memory, for segregating signaling traffic and related voice traffic including information useful in establishing a communications link, for transporting said voice traffic between a calling party and called party, and for transmitting said voice traffic and said signaling traffic via different communication
- 15 channels.
2. The apparatus of claim 1, wherein one of said communication channels is a data packet network.
- 20 3. The apparatus of claim 2, wherein voice traffic is carried by said data packet network.
4. The apparatus of claim 3, wherein said voice traffic is subject to compression processing compatible with said
- 25 wireless network.
5. The apparatus of claim 1, wherein one of said communication channels is a wireless network.
- 30 6. The apparatus of claim 5, wherein signaling traffic is carried by said wireless network.

7. The apparatus of claim 1, wherein said apparatus comprises a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having integrated MTA and CT portions.

5 8. The apparatus of claim 1, wherein said apparatus comprises a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having non-integrated MTA and CT portions.

9. The apparatus of claim 1, wherein said voice traffic is switched to the same communication channel as said signaling traffic in the case of a loss of local power.

10. An apparatus for providing bifurcated voice and signaling data over a network, comprising:

15 a memory, for storing protocols for interfacing with the network; and

a processor, coupled to the memory, for identifying a call request, for establishing a signaling link to a switch via a first transport medium, and for establishing a voice path to the switch via a second transport medium responsive to a determination that said called party answers.

11. The apparatus of claim 10, wherein the first medium is a wireless medium.

12. The apparatus of claim 11, wherein signaling traffic is carried by said wireless medium.

13. The apparatus of claim 10, wherein said second medium is a data packet network.

14. The apparatus of claim 13, wherein voice is carried by said data packet network.

5 15. The apparatus of claim 14, wherein said voice traffic is subject to compression processing compatible with said wireless network.

10 16. The apparatus of claim 10, wherein said apparatus comprises a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having integrated MTA and CT portions.

15 17. The apparatus of claim 10, wherein said apparatus comprises a Media Terminal Adapter-Cellular Transceiver (MTA-CT) having non-integrated MTA and CT portions.

18. The apparatus of claim 10, wherein said voice traffic is switched to the same medium as said signaling traffic in the case of a loss of local power.

20 19. An apparatus for providing bifurcated voice and signaling data traffic over a network, the apparatus comprising:

25 a data portion, for interfacing with a data network;  
a cellular portion, coupled to the data portion, for interfacing with a wireless network;  
a user interface portion, coupled to the data portion and cellular portion, for interfacing with peripheral devices;  
30 a Digital Signal Processing portion, coupled to the cellular portion and the data portion, for processing cellular and data information; and

a battery backup portion, coupled to the digital signal processing portion, for detecting power failures.

20. The apparatus of claim 19, wherein said data portion  
5 comprises at least one of:

a flash memory;  
a random access memory;  
an ethernet control processor; and  
an ethernet transceiver.

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21. The apparatus of claim 19, wherein said cellular  
portion comprises at least one of:

a cellular control processor;  
a cellular transceiver; and  
15 a memory device

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22. The apparatus of claim 19, wherein said memory device  
comprises at least one of:

a Battery Back up Random Access Memory (BBRAM); and  
20 a Non-Volatile Random Access Memory (NVRAM)

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23. The apparatus of claim 22, wherein said battery back  
up portion comprises:

a power failure detector.

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24. The apparatus of claim 19, wherein said digital signal  
portion comprises at least one of:

a modem; and  
a Coder/Decoder (CODEC).

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